

PHILADELPHIA, BALTIMORE & WASHINGTON RAILROAD, BRIDGE No. 3
(Pennsylvania Railroad, Island Road Bridge)
Pennsylvania Historic Railroad Bridges Recording Project
Spanning Island Road, north of Elmwood Ave.
Philadelphia
Philadelphia County
Pennsylvania

HAER No. PA-548

HAER
PA
51-PHILA,
724-

PHOTOGRAPHS

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HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
1849 C Street, NW
Washington, DC 20240

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Location: Spanning Island Rd., north of Elmwood Ave., Philadelphia, Philadelphia County, Pennsylvania

USGS Quadrangle: Philadelphia, Pennsylvania-New Jersey (7.5-minute series).

UTM Coordinates: I8/479030/44I8I70

Date of Construction: 1913.

Basis for Dating: Construction drawings.

Designer: Unknown.

Builder: Unknown.

Present Owner: National Railroad Passenger Corporation (Amtrak).

Present Use: Railroad bridge.

Structure Type: Concrete arch.

Significance: This arch span over Island Road is significant for its architectural detail, a whimsical interpretation of classical proportions in reinforced concrete. Its most remarkable features are balustrade panels depicting steam locomotives in stylized half-relief.

Historian: Justin M. Spivey, April 2000.

Project Information: The Historic American Engineering Record (HAER) conducted the Pennsylvania Historic Railroad Bridges Recording Project during 1999 and 2000, under the direction of Eric N. DeLony, Chief. The project was supported by the Consolidated Rail Corporation (Conrail) and a grant from the Pennsylvania Historical and Museum Commission (PHMC). Justin M. Spivey, HAER engineer, researched and wrote the final reports. Preston M. Thayer, historian, Fredericksburg, Virginia, conducted preliminary research under contract. Jet Lowe, HAER photographer, and

Joseph E. B. Elliott, contract photographer, Sellersville,
Pennsylvania, produced large-format photographs.

Description and History

The Philadelphia, Wilmington & Baltimore Railroad (PW&B) route through the Elmwood section of Philadelphia dates to the 1830s. A bridge over Island Road, however, probably did not exist at that time. The first span on record is a double-track deck girder bridge, 44'-0-1/2" long, constructed by the Edge Moor Iron Company of Wilmington, Delaware, in 1888.¹ Records indicate that Pencoyd Iron Works supplied girders for a third track in 1901.²

The Pennsylvania Railroad (PRR) had owned a majority of PW&B stock since 1881, and therefore influenced many of the latter railroad's decisions. In November 1902, the PRR oversaw the PW&B's merger with the Baltimore & Potomac Railroad to form the Philadelphia, Baltimore & Washington Railroad (PB&W).³ When the PRR began four-tracking its route north of Philadelphia in 1912, it is no surprise that the PB&W did the same south of the city. Rather than widen the existing girder bridge at Island Road, PB&W engineers decided to construct an entirely new reinforced concrete arch bridge. The arch is relatively flat in its proportions, spanning 70'-0" but rising only 11'-0" from the springing line, which is approximately 6'-0" above the street.

The Island Road Bridge ably demonstrates concrete's ability to take the shape of almost any form into which it is poured. The work of an unknown designer, the bridge is rife with architectural detail. Concrete in the spandrel walls is incised with horizontal lines to mimic courses of stone. Pilasters frame the arch, setting it off from adjacent retaining walls with the same *faux* coursing. This illusion of stone is carried further in the arch ring, which appears to have projecting voussoirs. Below the concrete balustrade is a heavy cornice, but a line of projecting circular bumps gives it an almost playful air. The balustrade piers atop each pilaster are the bridge's most remarkable and whimsical feature, however. Each depicts a steam locomotive in stylized half-relief, reflecting a great deal of craft and care in building formwork.

The bridge now carries passenger trains on Amtrak's Northeast Corridor and commuter trains on the Southeastern Pennsylvania Transportation Authority's R2 line.

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Notes

1. Agreement No. 1065, "Edgemoor Iron Co., with the Phila., Wilm. & Balto. R. R. Co. for Bges. 41, 49, 50, and 3, Maryland Div., 2/7/88," in file: Bridges - Maryland Division 1882-1890, Box 746, Construction Contracts, Engineering Department, Pennsylvania Railroad Company records, Acc. 1807, Hagley Museum and Library, Greenville, Del.
2. National Railroad Passenger Corporation (Amtrak) archives, Philadelphia, Pa.
3. Howard W. Schotter, *The Growth and Development of the Pennsylvania Railroad Company: A Review of the Charter and Annual Reports of the Pennsylvania Railroad Company 1846 to 1926* (Philadelphia: Press of Allen, Lane, and Scott, 1927), 199, 279.

Additional Source

1. U.S. Department of the Interior, HAER No. PA-71, "Northeast Railroad Corridor," 1977, Prints and Photographs Division, Library of Congress, Washington, D.C. See photograph PA-71-5 for aerial coverage of the Island Road Bridge.